

IN THE CLAIMS

1.-9. (canceled)

10. (new) A method for analyzing data in a computer-implemented data mining system, comprising:

establishing a database for storing and organizing transactional data, said transactional data being organized within said database in accordance with a data model, said data model comprising a basket table that contains summary information about transactions, an item table that contains information about individual items purchased by customers, and a department table that contains aggregate information about transaction sales by store department; and

mapping the transactional data contained in said database to aggregate the transactional data for cluster analysis.

11. (new) The method of claim 10, further comprising the step of:
analyzing the transactional data using cluster analysis into coherent groups according to perceived similarities in the transactional data.

12. (new) The method of claim 11, wherein said analyzing step utilizes a Gaussian Mixture Model.

13. (new) The method of claim 10, wherein said mapping step aggregates the transactional data into a single flat table view, and each row within said table view includes information concerning a single customer transaction.

14. (new) The method of claim 13, further comprising the step of:
analyzing the transactional data using cluster analysis into coherent groups
according to perceived similarities in the transactional data.

15. (new) The method of claim 14, wherein said analyzing step utilizes a
Gaussian Mixture Model.

16. (new) A computer-implemented data mining system for analyzing
data, comprising:

a computerized database for storing and organizing transactional data, said
transactional data being organized within said database in accordance with a data
model, said data model comprising a basket table that contains summary
information about transactions, an item table that contains information about
individual items purchased by customers, and a department table that contains
aggregate information about transaction sales by store department; and

means for mapping the transactional data contained in said database to
aggregate the transactional data for cluster analysis.

17. (new) The system of claim 16, further comprising:
a cluster analysis program for grouping the transactional data into coherent
groups according to perceived similarities in the transactional data.

18. (new) The system of claim 17, wherein said cluster analysis program
utilizes a Gaussian Mixture Model.

19. (new) The system of claim 16, wherein said means for mapping aggregates the transactional data into a single flat table view, wherein each row within said table view includes information concerning a single customer transaction.

20. (new) The system of claim 19, further comprising:
a cluster analysis program for grouping the transactional data into coherent groups according to perceived similarities in the transactional data.

21. (new) The system of claim 20, wherein said cluster analysis program utilizes a Gaussian Mixture Model.